

MR Lumbar Spine

Last Updated: 12/2025

Name	Plane	Sequence	Slice	Gap	FOV	Scan Range
3-Plane Localizer	Ax, Sag, Cor					
COR T2 (optional if scoliotic)	Coronal	T2 TSE	5 mm	0.5 mm	30-35	T11 to S3, pedicle to pedicle
SAG T1	Sagittal	T1 FLAIR	3 mm	0.3 mm	30-35	T11 to S3, pedicle to pedicle
SAG T2	Sagittal	T2 TSE	3 mm	0.3 mm	30-35	T11 to S3, pedicle to pedicle
SAG STIR	Sagittal	T2 TSE STIR	3 mm	0.3 mm	30-35	T11 to S3, pedicle to pedicle
AX T2	Axial	T2 TSE	4 mm	0.4 mm	15	T12 to S1
AX T1	Axial	T1 TSE	4 mm	0.4 mm	15	T12 to S1
OPTIONAL - INJECT CONTRAST 3 min delay						
AX T1 FS POST	Axial	T1 FS TSE	4 mm	0.4 mm	15	T12 to S1
SAG T1 FS POST	Sagittal	T1 FS TSE	3 mm	0.3 mm	30-35	T11 to S3, pedicle to pedicle

Notes:

- Place saturation band anterior to spine over the aorta
- Acquire axial block from T12 through S1 angled parallel to disk space, can be acquired in 2 or 3 acquisitions to compensate for lordosis or scoliosis.
- Coronal T2 only if scoliosis noted on localizer
- Contrast only for mass/mets, myelopathy or infection
- Contrast type- per site. Contrast dose- 0.2mL/kg
- No fat sat or use metal artifact suppression techniques (MAVERICK) on post contrast if significant hardware

Images:

- SAGITTAL - Plan on coronal plane, parallel to vertebral column, covering T11 through S3 (see Figures 1, 2, 3)
- AXIAL - Plan on sagittal and coronal planes, angle parallel to disc spaces, T12-S1. May be acquired in 2 or 3 blocks to compensate for lordosis or scoliosis. (see Figures 4, 5, 6)

Figure 1:

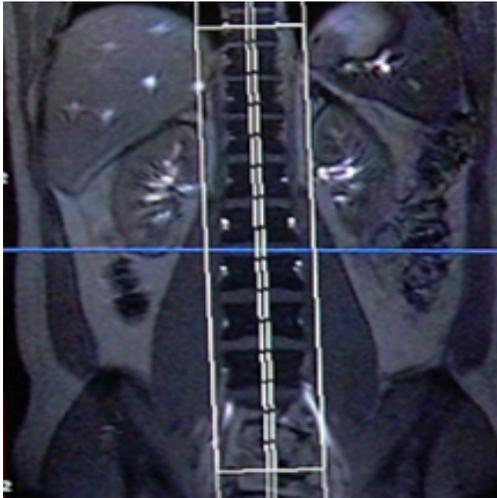


Figure 3:

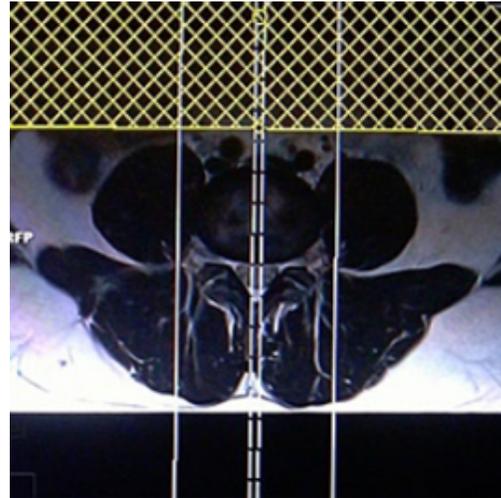


Figure 2:

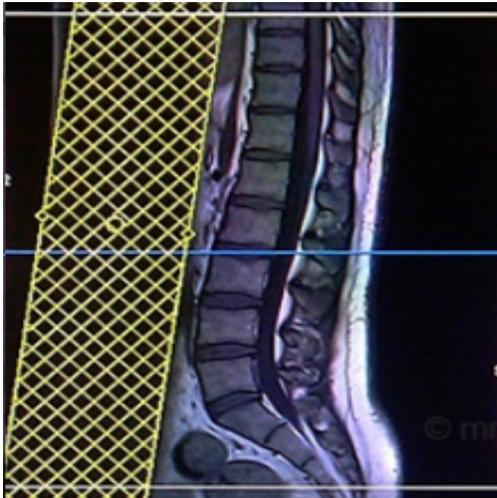


Figure 4:



Figure 5:

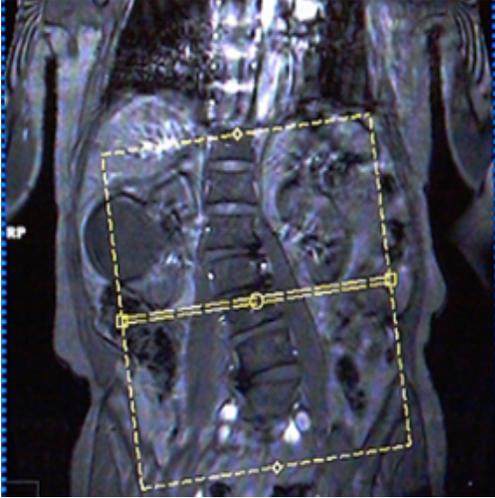


Figure 6:

